

WHAT IS CLAIMED IS:

1. A vehicle immobilization system comprising:

a microprocessor for operative connection to at least one critical run circuit of a vehicle, the microprocessor operable in a run mode and an armed mode;

- 5 an input system operatively connected to the microprocessor for providing user input to the microprocessor;

at least one sensor operatively connected to the microprocessor for triggering the microprocessor to enter the armed mode;

- 10 wherein the microprocessor is responsive to a tampering event to initiate a vehicle shut-down sequence in the run and armed modes and the microprocessor is also responsive to a first activation of the at least one sensor to initiate the armed mode.

2. A vehicle immobilization system as in claim 1 wherein the armed mode requires user input to the input system to return the microprocessor to the run mode.

- 15 3. A vehicle immobilization system as in claim 1 wherein the armed mode is operable when the vehicle is running.

4. A vehicle immobilization system as in claim 1 wherein the at least one sensor detects the presence of a user within the vehicle.

- 20 5. A vehicle immobilization system as in claim 1 further comprising an audio or visual alert operatively connected to the microprocessor for signalling the armed mode.

6. A vehicle immobilization system as in claim 1 wherein the input system includes a keypad.

7. A vehicle immobilization system as in claim 6 wherein the keypad is wirelessly connected to the microprocessor.

8. A vehicle immobilization system as in claim 1 wherein the input system is any one of or a combination of keypad, a wireless keypad, a mechanical key, an electromagnetic key, or a biometric sensor.
- 5 9. A vehicle immobilization system as in claim 1 wherein the microprocessor is responsive to an input signal from any one of or a combination of a vehicle parking brake sensor, a dome light sensor, a motion detector, or seat weight sensor to enter the armed mode.
- 10 10. A vehicle immobilization system as in claim 1 further comprising a remote signal interface operatively connected to the microprocessor for receiving wireless signals from a remote source and wherein microprocessor software can be updated upon receipt of the remote signal.
11. A vehicle immobilization system as in claim 1 further comprising a remote signal interface operatively connected to the microprocessor for receiving a wireless shutdown signal from a remote source to initiate the vehicle shut-down sequence.
- 15 12. A vehicle immobilization system as in claim 1 further comprising a remote signal interface operatively connected to the microprocessor for receiving wireless signals from a remote source and wherein microprocessor codes can be updated upon receipt of the remote signal.
- 20 13. A vehicle immobilization system as in claim 1 wherein the microprocessor is operable in a maintenance mode.
14. A vehicle immobilization system as in claim 13 wherein the microprocessor requires entry of a maintenance code to enter the maintenance mode.
15. A vehicle immobilization system as in claim 14 wherein the microprocessor requires entry of a maintenance code to exit the maintenance mode.
- 25 16. A vehicle immobilization system comprising a microprocessor for operative connection to at least one critical run circuit of a vehicle and to at least one sensor for

detecting the presence of a user within the vehicle, the microprocessor operable in a run mode wherein a trigger event will initiate a shut-down sequence by opening at least one critical run circuit and an armed mode while the vehicle is running and wherein an arm signal from the at least one sensor will initiate the armed mode.

5 17. A vehicle immobilization system comprising:

a microprocessor for operative connection to at least one critical run circuit of a vehicle, the microprocessor operable in a run mode and an armed mode;

a keypad input system operatively connected to the microprocessor for providing user input to the microprocessor;

10 at least one sensor operatively connected to the microprocessor for detecting the presence of a user within the vehicle;

an audio or visual alert operatively connected to the microprocessor for signalling the armed mode;

15 a remote signal interface operatively connected to the microprocessor for receiving wireless signals from a remote source and wherein microprocessor software can be updated upon receipt of a remote signal;

20 wherein the microprocessor is responsive to a tampering event to initiate a vehicle shut-down sequence in the run and armed modes and the microprocessor is also responsive to a first activation of the at least one sensor to initiate the armed mode and the armed mode requires user input to the input system to return the microprocessor to the run mode.

18. A vehicle immobilization system as in claim 17 wherein the microprocessor is operable in a maintenance mode.

25 19. A vehicle immobilization system as in claim 18 wherein the microprocessor requires entry of a maintenance code to enter the maintenance mode.

20. A vehicle immobilization system as in claim 18 wherein the microprocessor requires entry of a maintenance code to exit the maintenance mode.